

the screen to which the controller is facing, may be computed from the position information and rotation angle information.

[0304] Moreover, the computing means computes the visual line vector representing the direction of the screen of the imaging means based on the position information of the dotted light source, image of the light source unit within the picture image, and rotational angle information of the axis, and further computes the intersecting point of the visual line vector and the screen. According to this, the center of the picture image; that is, the intersecting point on the screen to which the controller is facing, may be computed from the position information and rotation angle information even with a simple structure.

[0305] According to the invention with the above features, the center of the picture image; that is, the intersecting point on the screen to which the controller is facing, may be computed from the position information and rotation angle information even with a simple structure.

[0306] The video game device according to the present invention comprises: the orientation detection device; image generation control means for generating game images containing at least a game character; image display means for displaying the generated game images on the screen of the display unit; and game progress control means for progressing the game by providing movement in accordance with prescribed game rules to the game character within the game space; wherein the game progress control means provides movement regarding the orientation of the controller to the game character based on the relationship between the orientation of the controller with the computing means and the display position on the screen of the display unit of the game character. According to this, it is possible to remotely provide a movement regarding the orientation of the controller to the game character based on the relationship between the direction of the controller and the display position of the game character on the screen of the display unit.

[0307] According to the invention with the above features, it is possible to remotely provide a movement regarding the orientation of the controller to the game character based on the relationship between the direction of the controller and the display position of the game character on the screen of the display unit.

[0308] This application is based on Japanese patent applications serial Nos. 2001-242819 and 2002-036791, filed in Japan Patent Office on Aug. 9, 2001 and Feb. 14, 2002, respectively, the contents of which are hereby incorporated by reference.

[0309] Although the present invention has been fully described by way of example with reference to the accompanying drawings, it is to be understood that various changes and modifications will be apparent to those skilled in the art. Therefore, unless otherwise such changes and modifications depart from the scope of the present invention hereinafter defined, they should be construed as being included therein.

What is claimed is:

1. An orientation detection marker which is provided in either one of a device main body and a controller for performing input operations as being pointed to a screen of a display unit provided to the device main body for display-

ing images, for detecting the orientation of the controller with respect to the screen, and which supplies information for computing said orientation to a picture image generated by imaging means provided in the other of the device main body and the controller, wherein said orientation detection marker comprising a light source having a mode including biaxial direction information.

2. An orientation detection marker according to claim 1, wherein the two axes of said biaxial direction are orthogonal to each other.

3. An orientation detection marker according to claim 1, wherein said light source is formed of a plurality of dotted light sources.

4. An orientation detection marker according to claim 1, wherein said light source emits light of a specific color.

5. An orientation detection marker according to claim 1, wherein said plurality of dotted light sources are formed by first and second light source units for specifying first two points and second two points separated by a prescribed dimension on one axis and a third light source unit for specifying third two points separated by a prescribed dimension on the other axis being disposed on the orientation detection marker mounting section for mounting said orientation detection marker.

6. An orientation detection marker according to claim 5, wherein the dimension between said first two points and the dimension between said second two points are set to be equal.

7. An orientation detection marker according to claim 5, wherein said first and second light source units share the inner two dotted light sources on the axis.

8. An orientation detection marker according to claim 5, wherein one of said dotted light sources is provided for common use at the intersecting point of the two axes.

9. An orientation detection marker according to claim 5, further comprising a fourth light source unit for specifying fourth two points separated by a prescribed dimension on said other axis.

10. An orientation detection marker according to claim 9, wherein the dimension between said third two points and the dimension between said fourth two points are set to be equal.

11. An orientation detection marker according to claim 9, wherein said fourth light source unit includes a dotted light source at said fourth two points.

12. An orientation detection marker according to claim 11, wherein said third and fourth light source units share the inner two dotted light sources on the axis.

13. An orientation detection marker according to claim 1, wherein said dotted light source is an illuminator.

14. An orientation detection marker according to claim 1, wherein said dotted light source is a reflector capable of reflecting the incident light from the front.

15. An orientation detection marker according to claim 1, wherein said dotted light source emits infrared light.

16. An orientation detection marker according to claim 5, wherein said orientation detection marker mounting section is formed with said dotted light source being exposed on both the front and back sides.

17. An orientation detection marker according to claim 5, further comprising a fifth light source for representing the front and back of the orientation detection marker.

18. An orientation detection marker according to claim 17, wherein said fifth light source unit is formed of one dotted light source.